

PERU¹

STUDYING in Mr. Squier's new work the records and ruins which attest the civilisation of Peru before the Spanish Conquest, one finds oneself repeating the often-asked question, Did these advanced arts and institutions arise out of native savagery, or were they at least developed under the guidance of ideas imported from the Old World? Mr. Squier holds that they were indigenous, and his opinion (which is that also of Mr. Markham) must have great weight, not only from the minute care with which he has examined the ruins during his two years' exploration, but from his familiarity with the Spanish literature on the subject. Some readers, however, like the present reviewer, while admitting that much of the Peruvian culture has such a stamp of peculiarity that it must be home-made, may not feel quite so certain of the whole being absolutely free from foreign influence. It is much to affirm of a bronze age people like the Peruvians (for particulars and drawings of their somewhat special types of bronze implements, see pp. 175, 579) that they invented this alloy independently. For an excellent case of mingled native originality and similarity to Old World types, attention may be called to the stone-circles of Sillustani, as exemplified by Fig. 1, reproduced from Mr. Squier (p. 384). He calls them "sun-circles," which, however, is begging the question of their as yet unproved purpose. At any rate there they stand, circles of erect unhewn stones like the cromlechs of Europe and Asia, but with a special feature in the surrounding pavement or "platform" of well-fitted hewn stones, with a gutter running all round the circle near the inner edge.

On the hill above are seen the ruins of chulpas or burial-towers. Fig. 2 shows two of these, the left-hand one being a beautiful example of building in close-fitting blocks of hewn-stone, an art which had attained in Old Peru to a perfection hardly reached elsewhere in the world. This tower is thirty-nine feet high, and widens as it rises from sixteen feet at the base to nineteen feet at the spring of the dome top. In a still larger chulpa there are hewn trachyte blocks as large as twelve feet long on the curve of the face, by seven feet high, and five feet deep. The stones, fitting together face to face without mortar, are imbedded within in the mass of the structure, which is of rough stones laid in clay. Extraordinary skill in masons' work is shown by these blocks being not only cut in the sides and outside curvature to a radius from the centre of the monument, but in the gradual swell of the structure as it widens out, as well as the curve of the dome, being accurately taken in each block (p. 382). The blocks were not shaped after being put in position, as is proved by numbers of them lying on the ground, perfectly cut to conform to their places in towers that were never finished, so that they were hewn to plans in which every dimension of the structures had been previously fixed. Yet with all this skill there was not the mechanical knowledge to provide anything like pulleys or cranes to hoist the heavy blocks into their places. The inclined

planes of earth and stones built up against the chulpas still remain, up which the stones were moved, probably with levers, and possibly with rollers also. Looking at the woodcut, one sees a low opening cut through a block at the base of the tower, just large enough to admit the body of a man; this leads into the circular burial

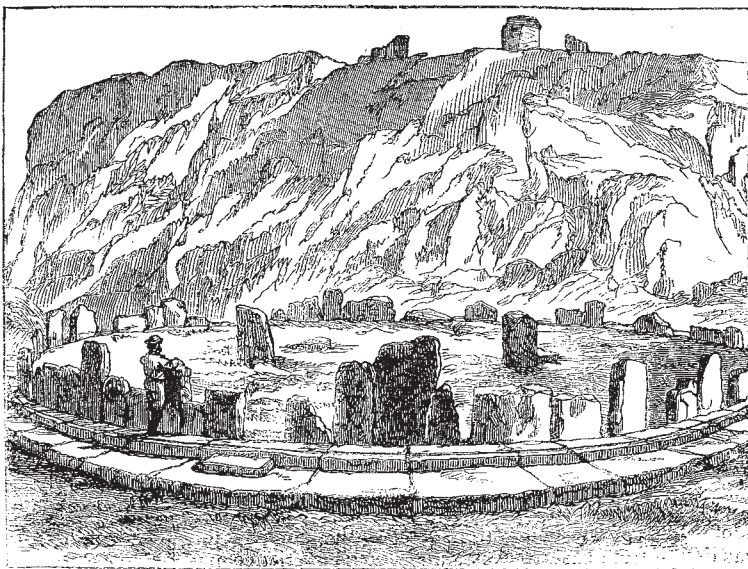


FIG. 1.—Sun-Circle, Sillustani.

chamber, vaulted with flat, over-lapping stones. This primitive arrangement of the "false arch," which reminds one of those which children make with their bricks, is usual in Peruvian as in Central American architecture. Yet, as if to complicate the problem of architectural history in America, there are exceptional cases where, as at Pachacamac, true arches of sun-dried bricks are still to be seen (p. 71).

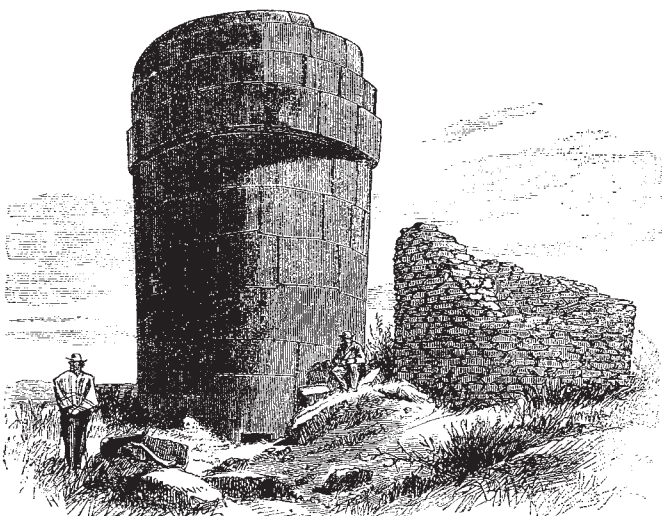


FIG. 2.—Round Chulpas, Sillustani.

Of the more usual Peruvian masonry, where the blocks, accurately faced, are kept in position by their mere bearing on one another, without cement or mortar of any kind, Fig. 3 presents a specimen. It is interesting for other reasons, being one of the Ynti-huatana, or "sun-years," by which the solar year was determined. The following passage from Garcilaso de la Vega's "Royal Commentaries of the Yncas" seems to describe structures of this kind :—

¹ "Peru. Incidents of Travel and Exploration in the Land of the Incas." By F. George Squier. (London: Macmillan, 1877.)

"The Yncas were also acquainted with the equinoxes, and observed them with great solemnity. . . . To ascertain the time of the equinox they had a stone column, very richly carved, erected in the open spaces in front of the temples of the sun. When the priests thought that the equinox was approaching, they carefully watched the shadow thrown by the pillar every day. The pillar was erected in the centre of a large circle, occupying the

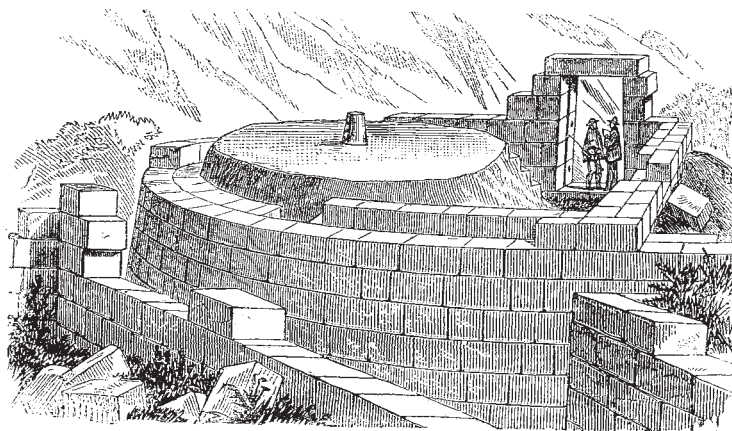


FIG. 3.—The Inti-Huatana of Pisac.

whole width of the courtyard. Across the circle a line was drawn from east to west, and long experience had shown them where the two points should be placed on the circumference. They saw, by the shadow thrown by the column in the direction of the line, that the time of the equinox was approaching; and when the shadow was exactly on the line from sunrise to sunset, and the light of the sun bathed the whole circumference of the



FIG. 4.—Ancient Vases and Modern Peruvian Heads.

column at noon, without any shadow being thrown at all, they knew that the equinox had arrived. Then they adorned the pillar with all the flowers and sweet herbs that could be gathered, and placed the chair of the sun upon it, saying that on that day the sun with all its light was seated upon the pillar" (Markham's translation, published by the Hakluyt Society, vol. i. p. 179).

It is true that a "stone column very richly carved"

seems an inappropriate description of the plain truncated conical gnomon shown in the drawing. It is, however, as Mr. Squier says (p. 525), "sharply cut and perfectly symmetrical." Can this be all that Garcilaso meant by "columnas de piedra riquisimamente labradas"? or were others of these structures furnished with more ornament? Garcilaso also describes towers near Cuzco erected for determining the solstices; but Mr. Squier considers that his account is confused, and that these so-called towers were only Ynti-huatanas. From this opinion Mr. Markham, writing in the *Academy* for May 19, quite dissents, and probably most readers who go through the whole of Garcilaso's chapter will consider that he had some idea of what he was writing about, and will take it on his (and other) evidence that the Peruvians had, in fact, solstice-towers as well as these equinox-cones. After all one must admit, with Mr. Squier, that the Peruvians had not advanced so far in astronomy and computation of time as the Mexicans and Central Americans.

No traveller before Mr. Squier had thoroughly explored the great lake of Titicaca with its sacred island, celebrated in tradition as the place whence Manco Capac and his sister-wife Mama Ocllo, children of the Sun, and first of the Yncas, came down to govern and civilise Peru. In this cold desolate region, twelve to thirteen thousand feet above the sea, ruins of palaces, convents, and the temples of the Sun and Moon still remain to attest its sanctity under the Ynca rule. Mr. Squier's estimate of the true value to be placed on the traditions of the Yncas is reasonable and moderate. To the warlike genius which enabled them to subjugate the vast land, to the political genius with which they organised the system of communication and social control, which is one of the most wonderful phenomena in the history of nations, he does full justice without countenancing the absurd idea that the whole development of Peruvian culture is to be attributed to this one conquering tribe. His researches, indeed, bring out more clearly than ever the distinctness of much of the native civilisation of Peru from that of the Yncas, whose rule had not been extended over the whole land till near the time of the Spanish Conquest.

The ruins of the temple of Pachacamac, and elsewhere near Lima, show us a people similar in origin and language to the Yncas, but who had their nationality and culture before the conquering tribe came down upon their coast from the high valleys of the Andes. The Chimus of the Truxillo district spoke a language still known in some villages, and said to be quite distinct from the Quichua of the Yncas. Yet these people had attained to peculiar skill in metal-work and pottery. Indeed from this district come the well-known Peruvian vessels with double spouts or double bodies often modelled in the form of an animal or a pair of animals, and with a kind of whistle uttering the creature's proper cry when the vessel is tilted so that the water in it forces air in and out through the hole. Not less curious are the well-modelled head-vases, which (Fig. 4) give us the means of comparing the features of the ancient and modern inhabitants. With reference to this and other drawings here reprinted from the hundreds contained in Mr. Squier's volume, he may be congratulated on the thoroughness with which he has enabled his readers to understand the book which suggested his exploration—Prescott's "History of Peru."

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